

Fact Sheet



For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on January 19, 2012.

Permit Number: **R30-00300006-2012**

Application Received: **10/14/2014**

Plant Identification Number: **03-54-003-00006**

Permittee: **Essroc Cement Corporation**

Facility Name: **Martinsburg**

Mailing Address: **1826 South Queen Street, Martinsburg, WV 25401**

Permit Action Number: *MM04* Revised: *March 27, 2015*

Physical Location:	Martinsburg, Berkeley County, West Virginia
UTM Coordinates:	243.50 km Easting • 4369.00 km Northing • Zone 18
Directions:	Take south Queen Street Exit off of WV State Route 45 at Martinsburg. The facility is 0.5 miles south at the end of Queen Street.

Facility Description

Essroc Cement Corporation owns and operates a cement manufacturing plant, which is characterized by SIC Codes 3241 and 1422. The plant operates a preheater/precalciner (PH/PC) kiln system that uses primary coal and petcoke. The PH/PC kiln produces cement clinker, an intermediary product of cement, which is then ground into finished cement. The nominal capacity of the plant is 2,212,890 short tons (stons) per year of clinker. Essroc uses approximately 292,110 stons of coal annually and fly ash from electric power plants. Essroc also has the ability to burn petroleum hydrocarbon contaminated soils that were generated onsite in the PH/PC cement kiln. The facility has the potential to operate twenty-four (24) hours a day, seven (7) days per week, and fifty-two (52) weeks per year.

The purpose of this modification is to facilitate the installation of a new alternative fuel feeding system permitted under R14-0026K.

Emissions Summary

With the proposed changes, the following emissions will increase:

Pollutant	Emission Increase (tpy)
PM	0.16
PM ₁₀	0.03
PM _{2.5}	0.01

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 4,436.95 tpy of CO; 4,009.59 tpy of NO_x; 599.14 tpy of PM₁₀; 4,507.9 tpy of SO₂; and 156.32 tpy of VOC. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Essroc Cement Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR7	To Prevent and Control Particulate Matter. Air Pollution from Manufacturing Processes and Associated Operations.
	45CSR13	Construction/modification permits.
	45CSR30	Operating permit requirement.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R14-0026K	12/19/2014	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

Description of Facility Changes

Essroc is proposing to install a new Alternative Fuel Feeding System to be located directly southwest of the existing conditioning tower at the Plant. A refuse based fuel (RBF) will be trucked into the Plant and the new Alternative Fuel Feeding System will be utilized to feed this RBF to the kiln system. This project will require paving additional areas directly to the south and southwest of the preheater tower. This will allow for the entire path of the trucks transporting the RBF to the Alternative Fuel Feeding System to be on paved roads, which will utilize water spray and sweeping, as needed, for dust suppression. A maximum of 38,581 stons/year (35,000 mtons/year) of RBF will be delivered and fed through the proposed Alternative Fuel Feeding System. The delivery trucks will import approximately 18 mtons per truck of the RBF; however, the exact weight of each delivery will fluctuate depending on the degree to which the RBF is compacted.

Once at the Alternative Fuel Feeding System the delivery trucks will back up to one of two alternative fuel hoppers. The RBF will be dumped (via a “walking floor”) in the truck to one of the two alternative fuel hoppers, both of which will be controlled to a new 706 cfm baghouse. From either hopper, the material will be screw conveyed to a pneumatic system that will send the material to a dosing system that will meter the RBF from the hoppers to the kiln system so that it is supplied to the kiln system at a rate of 7,000 tons/hour. The dosing system will be controlled by a new 1,413 cfm baghouse.

The new emission sources being proposed associated with the Alternative Fuel Feeding System are:

- CD41.04 - Alternative Fuel Feeding System D/C
- CD41.05 - Alternative Fuel Dosing System D/C
- EP25.15 - Alternative Fuel Trucks (paved)

The two baghouses proposed for the project will not vent directly to the atmosphere. Instead they will be vented directly to the clinker cooler and eventually will vent out the main kiln stack. No increase to emissions is requested for the main kiln stack; CD42.04 will continue to meet the existing emission limits specified in the existing permit. There will also be no change to the main kiln baghouse flowrate or fan speed, their current designs can accommodate the additional dedusting air from the Alternative Fuel Feeding System.

45CSR7: To Prevent & Control Particulate Matter Air Pollution from Manufacturing Process & Associated Operations

The haul roads proposed in this permit modification are subject to the fugitive particulate matter provisions of 45CSR§7-5.2. Essroc will meet these requirements by paving, sweeping and watering the haulroads.

Permit Language Changes

The following changes were made with this permit modification:

- The new emission units (mentioned above) were added to the emission units table.
- PM_{2.5}, PM₁₀, and TSP emissions were updated in condition 4.1.2.
- Alternative fuel feeding system outlet loading limits were added to condition 4.1.24.
- TSP and PM₁₀ limits for the alternative fuel feeding system were added to condition 4.1.56. Also, the combined emissions in this condition were updated as a result of addition of the alternative fuel feeding system emissions.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

None

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: N/A

Ending Date: N/A

Point of Contact

All written comments should be addressed to the following individual and office:

Rex Compston, P.E.
West Virginia Department of Environmental Protection
Division of Air Quality
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Charleston, WV 25304
Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478
Rex.E.Compston@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.